

AMENDMENTS TO THE CLAIMS


LISTING OF THE CLAIMS

Claim 1 (currently amended): An end-seal patch bag comprising a heat-shrinkable bag comprising a seamless tubular bag film, and a heat-shrinkable patch comprising a patch film, the patch being adhered to the bag, the patch extending across an entire width of a first lay-flat side of the tubular bag film, the patch bag having a seal across ~~a~~ the bottom thereof, the seal being continuous across the entire width of the lay-flat bag film, the seal being through both the patch as well as through both lay-flat sides of the bag, the seal being the only seal across the bag, the bag having a top which is not covered by the patch.

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Claim 2 (previously amended): A patch bag comprising a heat-shrinkable bag comprising a tubular bag film, and a heat-shrinkable patch comprising a patch film, the patch being adhered to the bag, the patch bag having a seal which is through both the patch as well as through both lay-flat sides of the bag, the sealed bag having a burst strength of at least 26 inches of water in a Linear Ramp Hot Burst Grease Test.

Claim 3 (original): The patch bag according to Claim 2, comprising a first patch adhered to a first lay-flat side of the bag, and a second patch adhered to a second lay-flat side of the bag, and the seal is through both patches and the bag film.

Claim 4 (previously amended): The patch bag according to Claim 3, wherein the patch bag is a side-seal patch bag, and both the first patch and the second patch extend across an entire length of the bag, the patch bag having a first seal along a first edge of the bag and a second seal along a second edge of the bag, and a folded bottom edge, the first and second seals being through the first patch, the second patch, and the bag film.

Claim 5 (original): The patch bag according to Claim 3, wherein the patch bag is an end-seal patch bag, and both the first patch and the second patch extend across an entire lay-flat width of the bag film in a lay-flat position, the end-seal patch bag having a bottom seal across the bag, the seal being through the first patch, the bag, and the second patch.

Claim 6 (previously amended): The end-seal patch bag according to Claim 5, wherein the bag has an uncovered top portion.

Claim 7 (original): The end-seal patch bag according to Claim 5, wherein the patches are adhered to the tubular bag film with an adhesive.

Claim 8 (original): The end-seal patch bag according to Claim 5, wherein the patches are adhered to an outside surface of the tubular bag film, and the entirety of the patch films are adhered to the tubular bag film.

Claim 9 (original): The end-seal patch bag according to Claim 5, wherein each of the patches is wider than the lay-flat width of the tubular bag film.

Claim 10 (original): The end-seal patch bag according to Claim 5, wherein the tubular bag film is seamless.

Claim 11 (original): The patch bag according to Claim 2, wherein the seal is made through films having a total thickness of from about 5 to 30 mils.

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Claim 12 (original): The patch bag according to Claim 11, wherein the seal is made through films having a total thickness of from about 10 to 20 mils.


Claim 13 (original): The patch bag according to Claim 2, wherein the seal has a width of from about 0.015 inch to about 0.25 inch.

Claim 14 (original): A process for making a patch bag, comprising:

- (A) adhering first patch film to an outside surface of a first lay-flat side of a lay-flat bag film tubing, the first patch having a width greater than the width of the lay-flat tubing;
- (B) adhering second patch to an outside surface of a second lay-flat side of a lay-flat bag film tubing, the second patch also having a width greater than the width of the lay-flat tubing;

(C) sealing an inside surface of the film tubing to itself, the sealing being carried out by applying heat to each of the patch outside surfaces, the heat being applied by a first means for heating and a second means for heating, the first and second means for heating being in alignment with one another, with the patches and bag tubing therebetween during sealing; and

(D) cutting across the tubing.

 Claim 15 (original): The process according to Claim 14, wherein the first means for heating comprises a first seal bar which has a flat surface which is in alignment with, and oriented towards, the second means for sealing, which comprises a second seal bar.

Claim 16 (original): The process according to Claim 15, wherein the second seal bar has a convex surface which is in alignment with, and oriented towards, the flat surface of the first seal bar.

Claim 17 (original): The process according to Claim 15, wherein the second seal bar has a flat surface which is in alignment with, and oriented towards, the flat surface of the first seal bar.

Claim 18 (previously amended): The process according to Claim 17, wherein the first seal bar and the second seal bar each comprise nichrome wire.

Claim 19 (original): The process according to Claim 15 wherein the first seal bar is in a first seal jaw assembly, and the second seal bar is in a second seal jaw assembly, and at least one of the seal jaw assemblies comprises a means for shock absorption.

Claim 20 (original): The process according to Claim 19, wherein the means for shock absorption comprises a resilient member.

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Claim 21 (original): The process according to Claim 16, wherein the bars exert a pressure on the films of from about 50 to 150 psi.

Claim 22 (currently amended): The process according to Claim 15, wherein the first seal bar comprises nichrome wire and the temperature of the first seal bar is controlled so that it reaches ~~an average temperature of~~ a maximum temperature of from about 180F to 400°F in the vicinity of the film being sealed, and wherein the temperature of the second seal bar is controlled so that it reaches a maximum temperature of from about 180°F to 400°F in the ~~region~~ vicinity of the film being sealed.

Claim 23 (currently amended): The process according to Claim 22, wherein a means for controlling the temperature constantly monitors and controls ~~the~~ voltage and current flowing through a nichrome wire in each of the first and second sealing bars, so as to

constantly monitor and control the temperature of the first and second sealing bars at a pre-set maximum temperature during sealing.

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